# USING ASSESSMENT DATA TO DRIVE INSTRUCTION



### WE ALL USE DATA

#### Do you use data to make informed decisions?

Turn and Talk:

What action steps would you take after hearing this information?

What other data would be helpful when making your decision as a consumer?





#### ACHIEVEMENT COACH PROGRAM

- This session is part of the New Jersey Achievement Coach Program.
- Achievement Coaches are educators selected by their districts as leaders who share their knowledge of teaching and learning with their peers.
- The three sessions led by Achievement Coaches were developed by New Jersey's educators to address specific needs.



# **NORMS**



#### **Active Listening and Learning**

Listen hard, speak softly

Take ownership over your learning

Be solution-oriented

Think about how this looks in your classroom or school



#### **Parking Lot**

Please write any outstanding questions you have on the "Parking Lot" in the back of the room

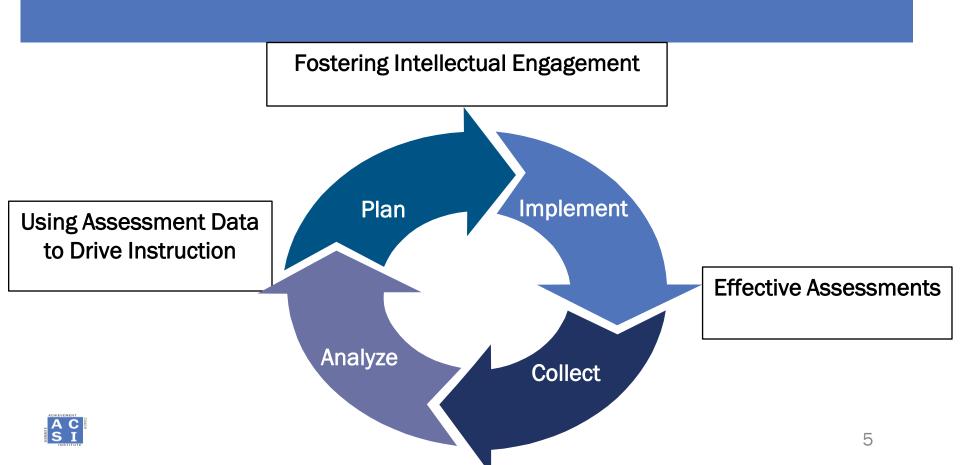


#### **Cell Phones**

Please keep phones on silent and take emergency calls/texts outside



#### MONITORING AND ADJUSTING



# SESSION OBJECTIVES

Apply concepts from today's presentation in planning concrete steps toward...

- understanding what data is useful in driving instruction to improve student achievement.
- identifying trends from data to make informed educational decisions.
- creating next steps and goals that are data-driven, actionable, and measurable.
- consistently reflecting and revising as part of the cycle of teaching and learning.



# DATA TO BRING WITH YOU

#### Please bring one piece of data from each column.

Formative Data	SGO	PARCC	
<ul> <li>Running records</li> <li>Exit tickets</li> <li>Fountas and Pinnell</li> <li>DRA2 levels</li> <li>SRI or SMI</li> <li>Quizzes</li> </ul>	<ul> <li>Pre-assessments</li> <li>Current grades</li> <li>Test performance</li> </ul>	<ul> <li>Evidence statement analysis report</li> <li>Evidence tables</li> <li>Released items sets</li> </ul>	
Please bring a laptop.			



# **AGENDA**

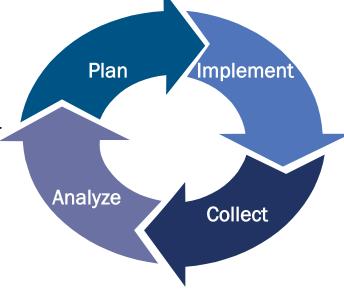
- INTRODUCING CORE CONCEPTS
- USING DATA TO DRIVE INSTRUCTION- FORMATIVE, SGO, PARCC
- CLOSING THOUGHTS



# INTRODUCTION TO MONITORING CYCLE

A process by which teachers...

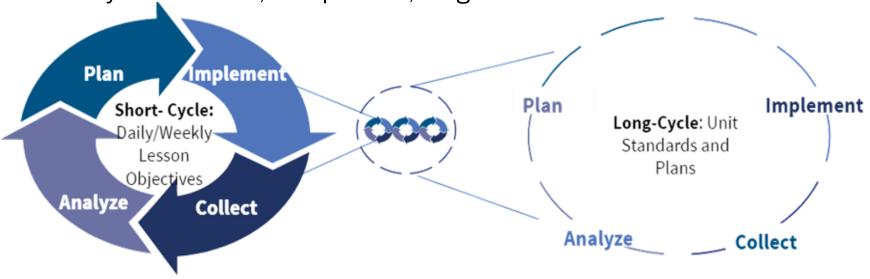
- Plan Develop curriculum, instruction, and assessments
- Implement Teach or take plan into action
- Collect Gather indicators of student progress or other evidence of practice
- Analyze Identify trends, patterns, and student misconceptions; decide what needs more reinforcement or re-teaching
- Plan Reflect on and revise the plan based on analysis of the data





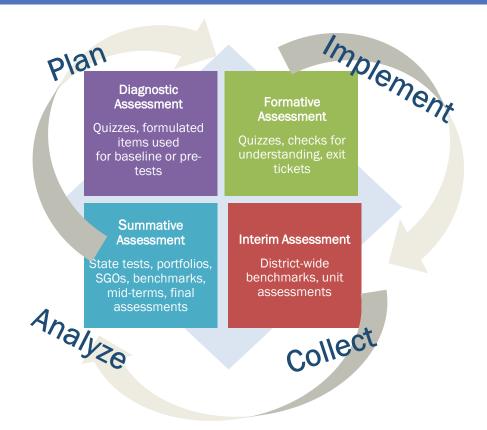
### MONITORING CYCLES AND PLANNING

Educators use these cycles not only to plan daily lessons, but also to analyze data from, and plan for, longer units of instruction.





# TYPES OF ASSESSMENT DATA

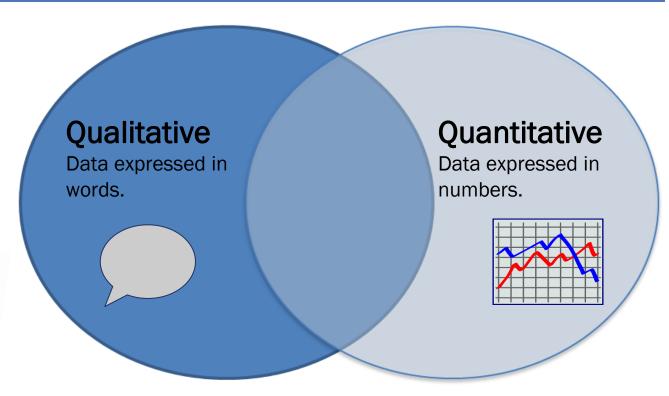




# CATEGORIES OF DATA

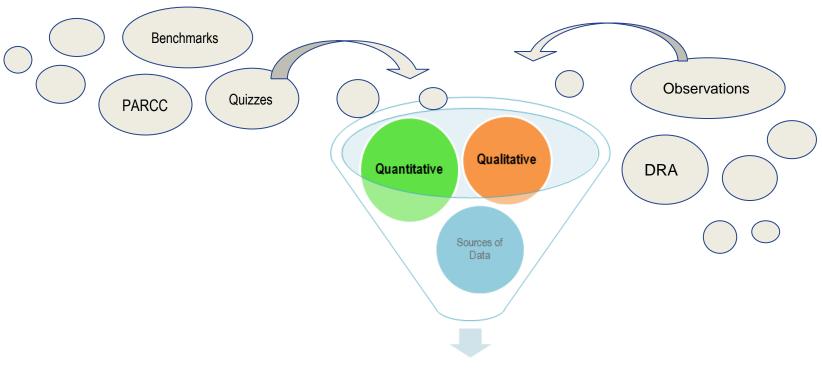
Using separate post-it notes, write down types of assessments you use.

Now separate into qualitative and quantitative





# DATA OVERLOAD





# PROTOCOLS

**Protocols** are r meet their analysis

#### Formative Assessment

 Data Analysis: Turning Data into Actionable Information Guides teachers in identifying trends in order to inform instruction and helps teachers create target goals, progress monitor toward goals, and reflect and revise goals.

romoied and learn structure is built via communication SGO Assessment

> Five Whys Tool for Root Cause Analysis Protocol Helps educators and students identify triggers and root causes for possible misconceptions or identified areas of concern.

#### **PARCC Assessment**

Data Driven Dialogue

Builds awareness and understanding of the participant's viewpoints, beliefs, and assumptions about data while v.state.nj.us/education, AchieveNJ/teams/Toolkit.pdf suspending judgments.



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ams function better and

# **AGENDA**

INTRODUCING CORE CONCEPTS

• USING DATA TO DRIVE INSTRUCTION – FORMATIVE ASSESSMENT DATA

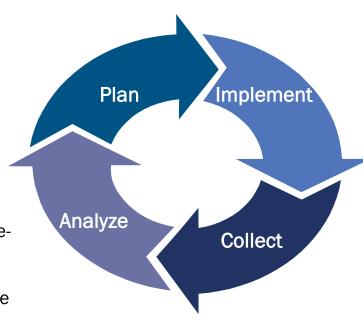
CLOSING THOUGHTS



### MONITORING CYCLES

A process by which teachers...

- Plan Develop curriculum, instruction, and assessments
- Implement Teach or take plan into action
- Collect Gather indicators of student progress or other evidence of practice
- Analyze Identify trends, patterns, and student misconceptions; decide what needs more reinforcement or reteaching
- Plan Reflect on and revise the plan based on analysis of the data





#### FORMATIVE ASSESSMENT DATA

Formative assessments monitor student learning and adjust ongoing instruction.

- Quizzes and exit tickets
- Checks for understanding (including digital platforms)
- Running records
- Reflective journals
- Behavior/classroom management systems

**Teachers** can utilize the data to adjust instruction and accelerate learning. **Collaboratively** analyzing formative assessment data addresses the question, "How can we collectively ensure that all of our students can meet the objectives?" The formative data should be used to drive instruction, not to evaluate educators. **Students** can use this information to help self-regulate their learning.



#### ANALYZING FORMATIVE ASSESSMENT DATA

#### "What gets measured gets done."





#### 1. Get It!

 Select the data to analyze for future action. (e.g., exit tickets, benchmark tests, quizzes, etc.)

#### Read It!

- Answer the following questions as it applies to your data.
  - What pops out at you?
  - Why is this data important?
  - If this data remains constant, what might be the possible consequences for our students?
  - What are your hunches about what might need to happen next to impact this data?



Turning Data into
Actionable Information
Protocol



#### 3. Talk It!

- Select a discussion leader who will facilitate an active dialogue.
  - What are the data facts that popped out during Read It! phase?
  - Why is this data important?
  - What are some possible actions that can be taken to address the data implications?



Fill out the following columns:

Here's What! Specific Facts	So What? Interpretation of Data	Now What? Prediction / Implications of Data



#### 4. Use It!

- o What is your target or goal?
- What data will you use to monitor and review your progress in meeting your goal?
- Apply to the presented chart:

School Objective/	SMART Goal:				
	Responsibility		Timeline		Monitoring
Action Steps or	Person(s)	Person(s)	(Benchmark	Required	Method -
Strategies	Responsible for	Responsible for	Monitoring	Resources	Evidence of
	Implementation	Monitoring	Dates)		Effectivenes



#### 5. Review It!

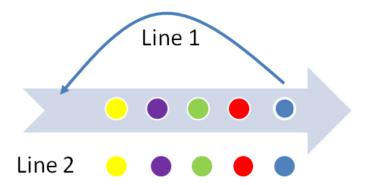
- Monitor your timeline.
- Then, review how the current data compares to what you expected.
   You may need to reassess your goal or action plan.



# **NEXT STEPS**

#### Inner/Outer Circle or Moving Down the Line Activity

- How can you use the results from this formative data protocol to drive your instruction?
- o Identify which team members you can utilize this protocol with in your school building.
- How are you going to use this protocol when you return to your classroom to examine student achievement?





# **AGENDA**

INTRODUCING CORE CONCEPTS

• USING DATA TO DRIVE INSTRUCTION -SGO ASSESSMENT DATA

CLOSING THOUGHTS



### MONITORING CYCLES

A process by which teachers...

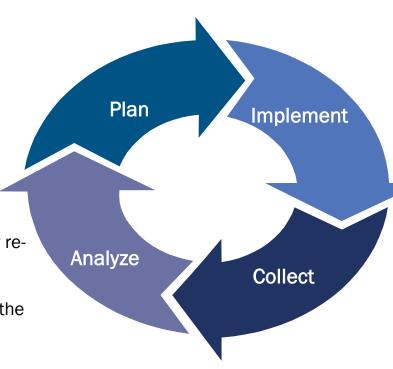
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 Plan – Reflect on and revise the plan based on analysis of the data





# SGO ASSESSMENT DATA

#### For Educators

SGOs provide a method by which teachers can <u>improve their practice</u> through high quality goal setting while clearly **demonstrating their effectiveness** through the learning exhibited by the students for whom they are responsible.

#### For Evaluators

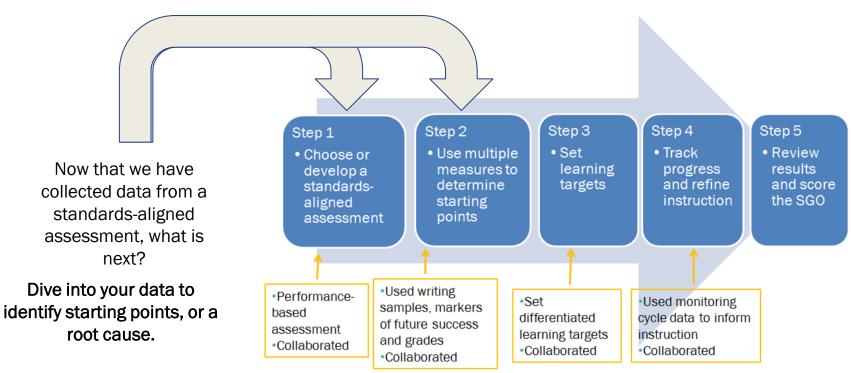
SGOs provide an **authentic measure** of teacher effectiveness that is aligned to the learning exhibited by students through an educator's **daily practice of teaching**.

#### **For Students**

When well-designed, SGOs promote **reflective** and **collaborative** teaching practices, **alignment** among standards, instruction and assessment, and **improve student learning**.



# SGO PROCESS



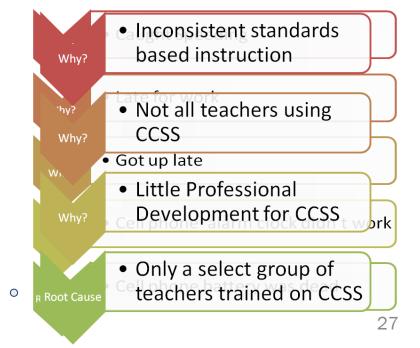


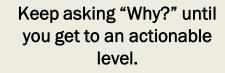
#### UNDERSTANDING ROOT CAUSE ANALYSIS

A Root Cause is "the most basic reason the problem occurs."

(Definition from "Total Quality Schools," by Joseph C. Fields)

By repeatedly asking the question, "Why?", you can peel away the layers of an issue and get to the root cause of a problem. Ist period PLC Problem Statement: In 1st period PLC Problem Statement: Significant amount of students were not proficient schoolwide on a standards-aligned assessment.

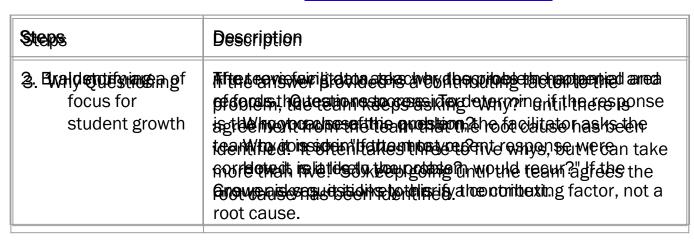






#### 5 Whys for Root Cause Analysis

Purpose: To help the educators get to the root cause of a problem. Protocol found in the <u>Collaborative Teams Toolkit</u>.





Let's dig down to the roots!

# PROTOCOL ACTIVITY

Step 1: Review Data

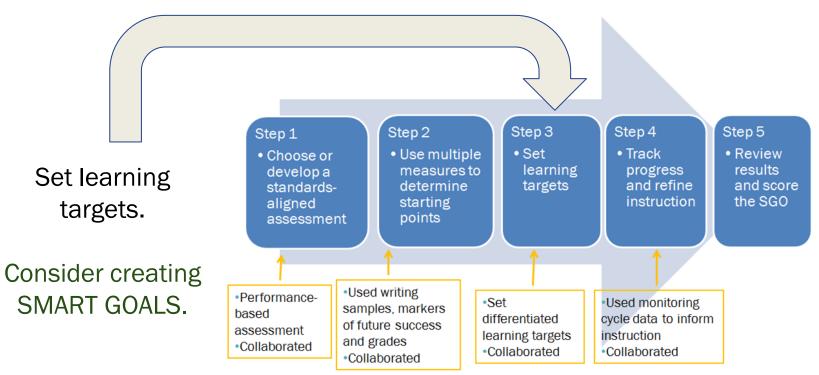
Step 2:
Brainstorming

Step 3: WHY Questioning: <u>May</u> take up to 5 Whys until the root cause is identified.

Identify area of focus for student growth  Look at your data. What trends do you see?	
---	--

Problem statement	One sentence description of event or problem
statement	
Why? ➡	
Root Cause(s)	1.
	2.
	3.
	To validate root causes, ask the following: If you removed this root cause, would this event or problem have been prevented?

### SGO PROCESS





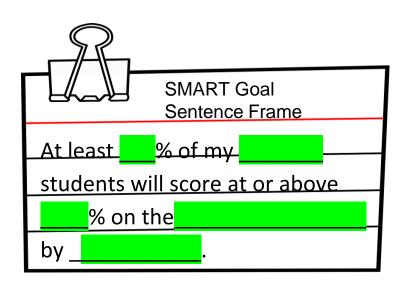
### WHAT IS A SMART GOAL?







# SET A SMART GOAL



Activity: Create a
Smart GOAL with
your group using the
sentence frame
provided.



# SMART GOALS



# SMART SGOs

	Typical Usage of SMART	SGOs Must Be	SGOs Require a Teacher to
S	Specific	Specific	Describe how many students learn "what" or grow by "how much"
M	Measurable	Measurable	Compare starting points to ending points using assessments of some type
A	Achievable	Ambitious but Achievable	Determine a reasonable amount of growth according to knowledge of students
R	Relevant	Relevant	Align SGOs to standards
Т	Time-related	Time-related	Set an appropriate instructional period



# **HOW SMART IS YOUR SGO?**

#### SGO Example: Mathematics, Grade 6



#### Overview

This 6th grade mathematics teacher created his SGO to focus on the grade-level algebra content standards in order to prepare his students for continued success in this content strand throughout standards in order to prepare his students for continued success in this content strand throughout middle and high school. This SGO is aligned to the Common Core State Standards (CCSS) and uses several data points to determine each student's Preparedness Group (Measures of Academic Progress, Previous Grade Final, and Diagnostic). The teacher's choice to focus on this specific content strand is acceptable as his mSGP score will encompass student achievement on the broader grade-level content standards taught throughout the year.

Name	School	Grade	Course/Subject	Number of Students	Interval of Instruction
		6	Mathematics	60	9/14/15 to 4/29/16

#### Standards, Rationale, and Assessment Method

Name the content standards covered, state the rationale for how these standards are critical for the next level of the subject, other academic disciplines, and/or life/college/career. Name and briefly describe the format of the assessment method.

#### RATIONALE

This SGO focuses on the grade-level algebra content strand from the Common Core State Standards (CCSS), which includes all standards within the Expressions and Equations Domain for Grade 6. Algebraic thinking is a strand of mathematics that relies on a strong foundation built throughout elementary and middle school mathematics.

Throughout the Expressions and Equations Domain in Grade 6, students are required to (1) make connections between previous arithmetic understandings and algebraic representations, (2) write and solve equations and inequalities, and (3) represent relationships between variables. By focusing on these skills in Grade 6, student proficiency in algebraic thinking and skills is supported and will enable greater student achievement in their continued study of mathematics in high school. As argued by the National Council of Teachers of Mathematics (NCTM) in Algebra as a Strand of School Mathematics for All Students, students "[c]haracterizing algebra as a strand of the school curriculum highlights the power and usefulness of algebraic thinking and skills — proficiencies that open academic doors and are evident in many professions and careers. Such an algebra strand in the school curriculum is critical and is accessible for all students." The emphasis placed in grade 6 by this SGO will enable students to continue developing their understanding of this critical skills.

#### Step 1: Standards Aligned →

#### ASSESSMEN

The assessment of student learning in this SGO will be the Grade 6 Algebra Common Assessment created by the Grade 6 Team. The format of the 50 point assessment is: 10 Selected Response – Multiple Choice (1 point items), 10 Constructed Response (2 point items), and 2 Performance Tasks (10 point items). See attached Assessment Blueprint for details.

#### STANDARDS

The following Grade 6 CCSS are assessed in this SGO:

6.EE.1: Write and evaluate numerical expressions involving whole-number exponents.

6.EE.2: Write, read, and evaluate expressions in which letters stand for numbers.

6.EE.2a: Write expressions that record operations with numbers and with letters standing for numbers.

#### Starting Points and Preparedness Groupings

State the type of information being used to determine starting points and summarize scores for each type by group. Modify the table as needed.

Preparedness	Information #1	Information #2	Information #3
Group	Fall MAP Math RIT	Grade 5 Math Final	Grade 6 Algebra Diagnostic
	(Percentile)	(Percent Correct)	(Percent Correct)
Remedial	<41	<61	<56
Low	41-60	61-70	56-70
Average	61-80	71-80	71-85
High	81-100	91-100	86-100

For students whose placement differs based on these data, the student will be placed in the Average Preparedness Group. Students will be placed in the Low or the High Preparedness Groups only if all three information data place the student in those groups. The Remedial Preparedness Group has been specifically created to address the needs of a group of 6 students who have entered sixth-grade more than two grade levels behind.

The teacher has created a logical system to create Preparedness Groups and has created a particular group to meet the needs of a subset of his students who are more than two grade levels behind. This is a technique that could be used by other teachers who have very high students, where the teacher may want to create a specific Preparedness Group to meet the acceleration needs of those students.

#### Student Growth Objective

State simply what percentage of students in each preparedness group will meet what target in the space below, e.g. "75% of students in each group will meet the target score." Describe how the targets reflect ambitious and achievable scores for these students. Use the table to provide more detail for each group. Modify the table as needed.

Eighty percent of students in each group will score at their target level as described in the table below on the End of Unit Algebra Common Assessment.

Although the Target Score on the SGO Assessment for the Remedial Preparedness Group is not passing on a grading scale, it is appropriate for these students. Their placement is adequately justified and the scoring target represents significant growth for this subset.

Preparedness Group (e.g. 1,2,3)	Number of Students in Each Group	Target Score on SGO Assessment
Remedial	6	60%
Low	19	80%
Average	24	85%
High	11	90%

#### Step 2:

Determining

←Starting Point





# **NEXT STEPS**

#### Be on the lookout for additional supports:

- SGO Quality Rating Rubric
- Updated SGO **Excel Tracking** and Scoring Tool

#### AchieveNJ Home

Teacher Evaluation Principal & VP/AP Evaluation

Evaluation of Other Educators Student Growth Objectives

Overview

Forms/Documents Exemplars

FAQ

Student Growth Percentiles Implementation Guidance

Professional Development

Events, Forums & Trainings Documents & Resources

FAQ



#### SGO Forms and Documents

The following forms and documents are those most commonly used by educators and those produced fo the 2015-16 school year for SGO purposes. Their use is optional. A complete set of forms and documents including those published in previous years can be found in the AchieveNJ document library.

- SGO Overview (PDF): A 2-page overview of the role of SGOs in AchieveNJ.
- 2.1 Presentation (PPT | PDF): Updated SGO workshop presentation. Supplemental resources car be found in document library.
- SGO 2.1 Guidebook (PDF | Word):
- Revised for 2015-16. Includes information about high quality assessments and target setting to improve SGO quality.
- SGO Quick Start Guide (PDF): A 2-page guide outlining the SGO process.
- SGO Form (PDF I Word): Includes sections to help teachers identify and record information for student starting points, record mid-year adjustments to SGOs, and reflect on SGO process in annual conferences
- SGO Excel Tracking and Scoring Tool: (Locked xls | Unlocked xls) This is a Microsoft Excelbased resource that allows teachers to compile their SGO data and connect it with their scoring form all in one place. There is also a quick start quide that can be used for quidance. If you are unfamiliar with the "Markers of Future Success" scores that are referenced in the tool, you can access a sample of rubric here.



# **AGENDA**

INTRODUCING CORE CONCEPTS

• USING DATA TO DRIVE INSTRUCTION - PARCC ASSESSMENT DATA

CLOSING THOUGHTS



### MONITORING CYCLES

A process by which teachers...

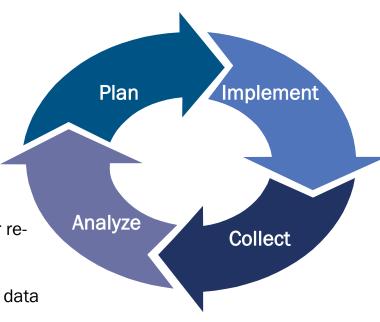
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### PARCC

#### How will PARCC results help you as a teacher?

Group discussion: As a group, reflect upon the following statement and discuss how it lends itself to the role PARCC plays in your district and your own teacher practice.

Regardless of your grade level, discipline, or instructional placement the PARCC assessment can play a key role in maximizing student achievement.





### PARCC ASSESSMENT DATA

District and School Level Data: Math, ELA, reading and writing, and also by grade levels

Disaggregated data, by subgroups

Item analysis using Evidence Statements

Student-level analysis



### MATERIALS NEEDED TO DO THIS WORK

Evidence Based Tables Published by PARCC



<u>Literacy Evidence Tables</u> (Reading and Writing)

Math Evidence Tables

Partnership Resource Center Create an Account - It's Free! NJ Code: nj1787

PARCC Released Items



### PROTOCOL INSTRUCTION

#### **Data Driven Dialogue**

http://schoolreforminitiative.org/doc/data\_driven\_dialogue.pdf

**Phase I: Predictions** - Surfacing perspectives, beliefs, assumptions, predictions, possibilities, questions, and expectations

Phase II: Go Visual - Re-create the data visually

**Phase III: Observations** - Analyzing the data for patterns, trends, surprises, and new questions that "jump" out

**Phase IV: Inferences** - Generating hypotheses, inferring, explaining, and drawing conclusions; defining new actions and interactions and the data needed to guide their implementation; building ownership for decisions



## PROTOCOL ACTIVITY PHASE 1 PREDICTIONS

#### Look at Evidence Tables to formulate predictions before reviewing data

Please reflect privately and record several of your preliminary thoughts about the data. One or more of the following thought-starters may be helpful.

- I assume...
- I predict...
- I wonder...
- My questions/expectations are influenced by...
- Some possibilities for learning that this data may present...



# PROTOCOL ACTIVITY PHASE 2 GO VISUAL

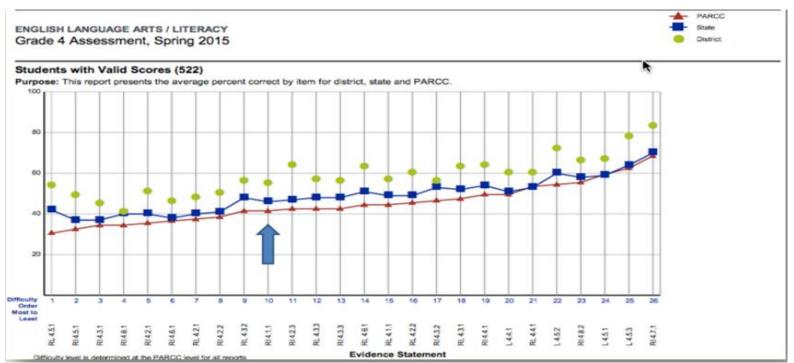
Re-create the data visually, on large sheets of paper, on a data wall, etc.

Mark up the data to better understand it (i.e., highlight trend lines in different colors, do math calculations and chart those, color code parts of the data that relate to each other).

Make the data your own!



# PROTOCOL ACTIVITY PHASE 2 GO VISUAL





### EVIDENCE STATEMENT ANALYSIS

#### **Evidence Statement Analysis**

Grade 4

This report shows the operational Evidence Statements for the given grade and subject sorted by difficulty

### Grade 4 Assessment Spring 201

Grade 4 Assessment, Spring 2015

Difficulty Order Most to Least	Evidence Statement	Common Core State Standard(s)	Domain	
1	RL 4.5.1	RL.4.05	Reading: Literature	
2	RI 4.5.1	RI.4.05	Reading: Informational Text	
3	RI 4.3.1	RI.4.03	Reading: Informational Text	
4	RI 4.8.1	RI.4.08	Reading: Informational Text	
5	RI 4.2.1	RI.4.02	Reading: Informational Text	
6	RI 4.6.1	RI.4.06	Reading: Informational Text	
7	RL 4.2.1	RL.4.02	Reading: Literature	
8	RI 4.2.2	RI.4.02	Reading: Informational Text	
9	RL 4.3.2	RL.4.03	Reading: Literature	
10	RI 4.1.1	RI.4.01	Reading: Informational Text	
11	RI 4.2.3	RI.4.02	Reading: Informational Text	
12	RL 4.3.3	RL.4.03	Reading: Literature	
13	RI 4.3.3	RI.4.03	Reading: Informational Text	
14	RL 4.6.1	RL.4.06	Reading: Literature	
15	RL 4.1.1	RL.4.01	Reading: Literature	
16	RL 4.2.2	RL.4.02	Reading: Literature	
17	RI 4.3.2	RI.4.03	Reading: Informational Text	
		E1 1 00		



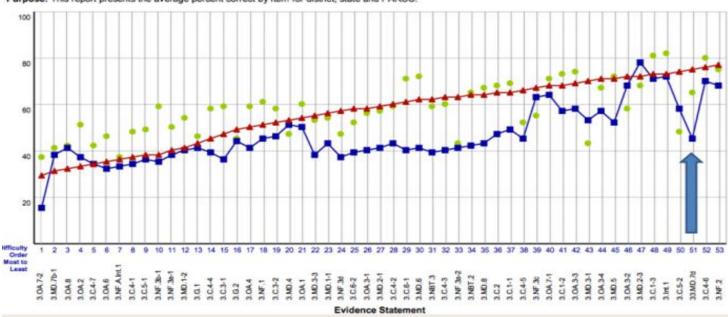
# PROTOCOL ACTIVITY PHASE 2 GO VISUAL

MATHEMATICS Grade 3 Assessment, Spring 2015



#### Students with Valid Scores (999)

Purpose: This report presents the average percent correct by item for district, state and PARCC.





# EVIDENCE STATEMENT ANALYSIS REPORT

**MATHEMATICS** 

Grade 3 Assessment, Spring 2015

Difficulty Order Most to Least	Evidence Statement	Common Core State Standard(s)	Domain	
36	3.C.2	3.OA.B.06	Operations and Algebraic Thinking	
37	3.C.1-1	3.OA.B.05	Operations and Algebraic Thinking	
38	3.C.4-5	3.MD.C.07	Measurement and Data	
39	3.NF.3c	3.NF.A.03.c	Numbers and Operations - Fraction	
40	3.OA.7-1	3.OA.C.07	Operations and Algebraic Thinking	
41	3.C.1-2	3.OA.D.09	Operations and Algebraic Thinking	
42	3.OA.3-3	3.OA.A.03	Operations and Algebraic Thinking	
43	3.MD.3-1	3.MD.B.03	Measurement and Data	
44	3.OA.3-4	3.OA.A.04	Operations and Algebraic Thinking	
45	3.MD.5	3.MD.C.05	Measurement and Data	
46	3.OA.3-2	3.OA.A.03	Operations and Algebraic Thinking	
47	3.MD.2-3	3.MD.A.02	Measurement and Data	
48	3.C.1-3	3.MD.C.07	Operations and Algebraic Thinking	
49	3.Int.1	Multiple	Multiple	
50	3.C.5-2	3.MD.C.07.b 3.MD.C.07.d	Measurement and Data	
51	3.MD.7d	3.MD.C.07.d	Measurement and Data	
53	3.C.4-6	3.OA.D.09	Operations and Algebraic Thinking	



## PROTOCOL ACTIVITY PHASE 3 OBSERVATIONS

Engage with the actual data and note only the facts that you can observe in the data

Please study the data privately and record several of your observations.

#### Remember:

Just the facts! If you catch yourself using the following words, then stop.







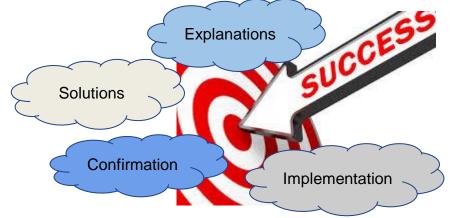




## PROTOCOL ACTIVITY PHASE 4 INFERENCES

#### During Phase IV Inferences dialogue, you...

- generate multiple explanations for your Phase III Observations.
- identify additional data that may be needed to confirm/contradict your explanations.
- propose solutions/responses.
- identify data needed to monitor implementation of your solutions/responses.





## NEXT STEPS

Action Plan							
Team Focus Area:							
Change to Be Sought:							
Collaborating Group(s):ACTION STEPS							
Action Steps	By Whom	By When	Resources and Support Available/Needed		Potential Barriers or Resistance	Communication Plan for Implementation	
What needs to be done?	Who will take actions?	By what date will the action be done?	Resources Available	Resources Needed	What individuals and organizations might resist? How?	What individuals and organizations should be informed about/involved with these actions?	
Step 1: By							
Step 2: By							
Step 3: By							
Step 4: By							



### **AGENDA**

INTRODUCING CORE CONCEPTS

USING DATA TO DRIVE INSTRUCTION

CLOSING THOUGHTS



### MOVING FORWARD







### **COLLABORATIVE TEAMS**

- Collaborative teams provide educators opportunities to have evidence based conversations.
- Depending on the nature and length of the monitoring cycle, different types of collaborative teams may be appropriate.



1 on 1 meetings



Small Teams (3-5 people)



Large Groups



### EFFECTIVE PARTNERSHIPS





## SETTING A SMART GOAL







### TEAM SMART GOAL SETTING PLAN



In order to achieve our SMART goal we will follow the plan mapped below:

Action Steps	What steps or activities will you initiate to achieve the goal?
Designation	Who will be responsible for the work?
Timeframe	What is a realistic timeframe for each step or activity?
Evidence	What impact on student learning do we expect to see?



### WRITE A SMART GOAL THAT "STICKS"

Now that you have a goal, let's make it stick!

No goal: 0%

Set a goal: 20%

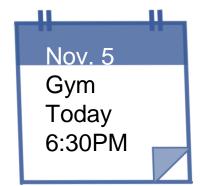
Write it down: 35%

Accountability partner: 51%

Specific action steps: 86%

Picking you up at 6:30!









### MODULE REFLECTION

### Gallery Walk

Create <u>data-driven</u> SMART goals from the following partnership choices on post-it notes

- Post created goals on the Effective Partnership chart paper
- Review created goals by teams, making comments on presented chart paper







### ADDITIONAL RESOURCES

- o Collaborative TeamsToolkit
- o Blended Online Learning
  - Modules
- o NJ CORE
- o PARCC PRC

